DEPARTMENT OF ECOLOGY and US EPA FACT SHEET

Draft Dangerous/ hazardous waste Permits

Bonneville Power Administration, Ross Complex

Vancouver Washington 98663

ID Number: WA1 891 406 349

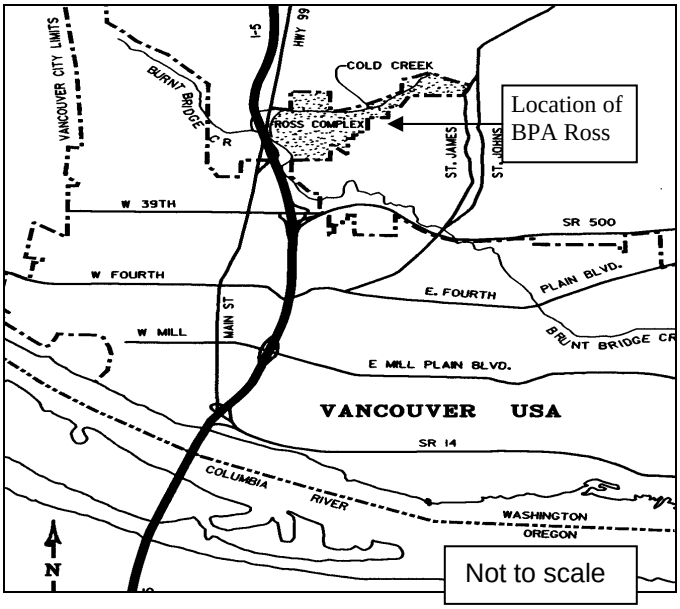
The Washington State Department of Ecology (Ecology) and the US Environmental Protection Agency, Region 10, (EPA) are each issuing **draft permits** for the Bonneville Power Administration's (BPA) storage of state dangerous waste and federal hazardous waste at the Ross Complex in Vancouver, Washington (BPA Ross or facility). Ecology's permit covers management of dangerous waste, which includes hazardous waste, while EPA's permit covers management of hazardous waste only. For this fact sheet, "dangerous/ hazardous waste" indicates dangerous waste regulated by Ecology and/or hazardous waste regulated by EPA.

Final decisions on these permits will be made after the agencies receive and evaluate public comments.

Ecology has determined that preparation of an environmental impact statement under the State Environmental Policy Act (SEPA) is not needed.

This fact sheet:

- ✓ Describes the facility, including BPA Ross's waste storage and recycling activities
- ✓ Summarizes requirements in the proposed permits for operation and closure of the storage area, and for corrective action at the facility
- ✓ Describes Ecology's and EPA's processes to make final decisions on the permits



Comment Period

On: Draft Permits and State's SEPA determination

Dates: October 12, 2000 through November 27, 2000

Submit comments on both permits to:

Janet Rhodes
Hazardous Waste & Toxics Reduction Program
Department of Ecology, PO Box 47600
Olympia, WA 98504-7600
E-Mail Address – jrho461@ecy.wa.gov

To be accepted, comments must be postmarked or received by November 27, 2000. Hand deliver comments to the address below.

Possible Hearing on November 14, 2000, see page 2 for more information.

Review the information Ecology and EPA used to make their tentative decisions to issue permits, between 9 a.m. and 4:30 p.m., at:

Department of Ecology
Hazardous Waste & Toxics Reduction Program
300 Desmond Drive, Lacey, Washington 98503
Contact Janet Rhodes - (360) 407-6700 or (360) 407-6006 (TDD)

Or: BPA Ross Complex, 5411 NE Highway 99
Vancouver, Washington, 98663
Contact: Elaine Stratton (360) 418-2554.

To receive a copy of Ecology's draft permit, SEPA Determination of Nonsignificance, or the federal environmental assessment:

- ✓ Contact Janet Rhodes at one of the addresses or phone numbers listed above; or
- ✓ Visit our web site-www.ecy.wa.gov/ programs/hwtr

For a copy of EPA's draft permit:

- ✓ Contact Jan Palumbo at (206)553-6702 (voice); at palumbo.jan@epamail.epa.gov (email); or at US EPA Region 10 - WCM-121, 1200 6th Ave, Seattle, WA 98101.

To receive any documents in alternate format, please contact Janet Rhodes at one of the addresses or phone numbers listed above. If you have special accommodation needs for the hearing, contact Ms. Rhodes by November 7.

Ecology and EPA are equal opportunity agencies.

A. Overview

Primarily, BPA Ross serves as a control center for generating and transmitting electricity throughout the Pacific Northwest. As part of these operations, BPA Ross receives and stores dangerous/ hazardous waste generated at BPA sites throughout the region. BPA Ross also consolidates -- or bulks -- waste, depressurizes and drains aerosol cans containing waste, and recycles wastes generated on-site.

BPA Ross is storing dangerous/ hazardous waste in their HazMat building under *interim status*. This status is available to facilities that existed before they became regulated under state and federal dangerous/ hazardous waste regulations. Interim status allows the facility to continue operating while the facility, Ecology, and EPA complete the processes leading to final permit decisions.

Ecology and EPA must require a facility having interim status to submit a detailed permit application for a final permit (Washington Administrative Code, or WAC, 173-303-806(2) and 40 CFR Part 270). The permit application must provide site-specific design and operating information to demonstrate the facility can meet regulatory requirements. If the agencies determine that the application is complete, they prepare draft permits for public notice (WAC 173-303-840(2) and 40 CFR Part 124). The Ecology permit incorporates most of the permit application. EPA's permit includes selected pieces of the application.

BPA is asking for a "final facility permit" to continue their current operations. They propose to maintain their current storage capacity of 31,240 gallons and to continue to accept the same types of wastes they have been receiving for years. If permits are issued, BPA Ross will continue to accept waste generated only by BPA at sites throughout their service area.

In general, the wastes managed by BPA Ross are related to operation and maintenance activities. Under the proposal, the variety of waste streams will continue to be limited and include: 1) solvents and combustible wastes; 2) painting-related wastes; 3) miscellaneous wastes such as capacitors (without PCBs) that have toxic fluids and battery electrolyte; 4) wastes from laboratory analyses; 5) mercury-containing wastes; 6) wastes from the garage, such as motor oils and antifreeze; 7) other oils, such as lubricating, hydraulic, turbine, and compressor oils; and 8) photography and photocopying wastes, such as inks and developers.

Ecology and EPA have determined that the BPA Ross permit application is sufficiently complete and have prepared draft permits for public notice.

The permits include requirements for receiving and managing the dangerous/ hazardous waste. They also include changes to operating procedures that will increase protection to human health and the environment.

B. Procedures for Reaching Final Decisions

The draft permits are subject to public review and comment. Ecology and EPA will consider all public comments before making their final decisions on whether to issue final permits to the BPA Ross facility. Regulatory requirements for the public review process are described in WAC 173-303-840(3) through (9) for Ecology and in 40 CFR Part 124 for EPA.

Comment Period

The 45-day comment period on the agencies' tentative decisions to issue dangerous/ hazardous waste management facility permits, and on Ecology's SEPA Determination of Nonsignificance, runs from October 12, 2000, through November 27, 2000.

See page 1 for avenues for submitting comments and reviewing documents.

Public Hearing Possible

If significant public interest is expressed in the draft permits, Ecology and EPA will conduct a public hearing. To request a hearing, or to request special accommodation for the hearing, contact Janet Rhodes by phone, letter, or e-mail by November 7, 2000. If there is no significant interest expressed in the tentative permit decisions or Ecology's DNS, then Ecology and EPA will cancel the hearing.

To find out if the public hearing will be held, contact Janet Rhodes after November 7, 2000.

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If the public hearing is held, it will be November 14. The agencies will hold an open house from 7 p.m. to 8 p.m. followed by the hearing at 8 p.m., at the Fish and Wildlife office, in Vancouver, Washington. This is the same building that houses Ecology's Vancouver office; the address is 2108 Grand Boulevard. For directions to the site, call the receptionist at Ecology's Vancouver Office at (360) 690-7171 (voice) or (360) 690-7147 (TDD).

At the open house, visit with staff from Ecology and BPA to learn more about storage of dangerous/ hazardous waste at BPA Ross and the draft permits.

How to participate

You may request, and review and comment on, the draft permits, the state DNS, and the federal environmental assessment (which Ecology adopted in the place of an environmental checklist). The files containing information Ecology and EPA used to make their decisions are also available for review; see page 1 for locations and hours of availability.

For comments to be considered by the agencies in their further evaluation of the proposal, they must be received at Ecology by the deadline on page 1. Please specify which comments are on EPA's draft permit and which on Ecology's draft permit.

The most effective comments are those in which the commenter:

- ✓ Provides specific information describing what condition he or she believes is inappropriate
- ✓ Provides factual and regulatory support for the comment
- ✓ Suggests changes to fix the problem
- ✓ Includes supporting material, unless EPA and Ecology already have the material. For example, if the comment references a state or federal rule on managing dangerous/ hazardous waste, the agencies already have it. If the comment references a report or letter that is not part of the application or the agency files on BPA, or isn't a commonly available reference, then EPA and Ecology likely do not have it. In such cases, the person commenting needs to provide a copy of the reference.

Furthermore, WAC 173-303-840(6) and 40 CFR Part 124 provide details on the obligation to raise issues and provide information during the public comment period if a person believes a condition of the draft permit is inappropriate.

Decision-making process

Responding to comments and testimony

Ecology and EPA will consider and respond to written comments submitted by the public and any testimony if the public hearing is held. Ecology will respond to comments on its permit and EPA to those on its permit.

Final permit decision

After considering the comments and testimony, the agencies will make final permit decisions or make new tentative decisions on the permits. In addition, Ecology will allow the Determination of Nonsignificance (DNS) to stand, or based on comments, amend or withdraw it.

If Ecology and EPA issue final permits to BPA Ross, they will run for ten years from the effective date(s). However, the permits can be modified at any time during this period. Permit modifications are subject to public review and comment. Procedures for modifying a permit and the types of permit changes that are subject to public review and comment are discussed in WAC 173-303-830 and in 40 CFR §§ 270.41 and 270.42.

Ecology and the United States Environmental Protection Agency (EPA) will each sign the final decision for its own permit.

The agencies will give public notice of the final permit decisions. These notices may be combined into one document.

Effective date of decisions

Normally, a permit is effective 30 days after the agency gives notice of the final decision to BPA and all persons who commented. If there are no comments on the draft permit, the effective agencies may specify an earlier date for the final permit.

If an agency makes a new tentative decision on its permit, there will be a new comment period on that permit. If the DNS is withdrawn due to public comment, Ecology will begin work toward preparation of an EIS.

Environmental Review

Both Ecology and BPA conducted environmental review of the project.

BPA Ross is a federal facility and not subject to local permits. Therefore, no State Environmental Policy Act, or SEPA, evaluation was performed before the agency constructed its existing storage building or other parts of the BPA Ross plant. BPA, however, did perform an evaluation under the National Environmental Policy Act.

In June 1992, BPA developed an environmental assessment for construction of the HazMat building, which contains the dangerous/ hazardous waste storage unit. BPA followed the environmental assessment with a Finding of No Significant Impact, which means they determined that no environmental impact statement (EIS) was needed.

Washington State's SEPA Rules, Chapter 197-11 WAC, allow Ecology to adopt environmental documents prepared by federal agencies. Ecology reviewed BPA's environment-al assessment and determined that it meets the needs of a SEPA environmental checklist. Therefore, the department based its review on the environmental assessment, concluding that an EIS was not needed. Ecology's Determination of Nonsignificance, or DNS, was issued October 9, 2000. It is open for public comment during this comment period.

Appealing the Final Permit Decisions

Someone who comments on a permit, or who participates in a public hearing, may appeal the agency's final decision within 30 days of the date the decision is issued. Others may appeal changes made between the draft permit and the final permit, even if they did not comment during the comment period.

Appeal Ecology's decision to the Pollution Control Hearings Board. Appeal EPA's decision to the Environmental Appeals Board.

For more information, call Janet Rhodes (Ecology) at (360) 407-6708 or Jan Palumbo (EPA) at (206) 553-6707.

Agencies' Authorities

In Washington State, both the EPA and Ecology regulate hazardous waste. Washington actually regulates more wastes than the federal EPA; this universe of regulated wastes is called *dangerous wastes*.

The Washington State Hazardous Waste Management Act, Chapter 70.105 Revised Code of Washington (RCW), and the Dangerous Waste Rules, Chapter 173-303 WAC, regulate the management of dangerous waste in Washington. WAC 173-303-800 specifies that facilities such as BPA Ross, which store dangerous waste, must obtain a permit.

The U.S. EPA has requirements for facilities that manage hazardous waste. The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the regulations promulgated thereunder in Title 40 of the Code of Federal Regulations (CFR), regulate the management of hazardous waste nationwide.

On January 31, 1986, the State of Washington's dangerous waste management program received final authorization to implement the authorized state hazardous waste regulations in lieu of the federal hazardous waste regulations. The State's program has also received approval for subsequent revisions to this federal program. The last approval became effective on January 11, 2000. Ecology's state hazardous waste regulatory program is authorized in lieu of most of the federal hazardous waste regulatory program.

Ecology adopted new federal requirements that went into effect June 10, 2000.

C. Facility Description

Primarily, BPA Ross serves as a control center for the generation and transmission of electricity throughout the Pacific Northwest. As part of these operations, BPA Ross receives and stores dangerous/ hazardous waste generated at BPA sites throughout the region. BPA Ross accepts only waste generated by BPA Ross and other BPA sites. Waste in containers is stored at the dangerous/ hazardous waste management unit; the maximum size of containers is 85 gallons. There is no storage of dangerous/ hazardous waste in tanks, surface impoundments or other types of units. There is no treatment of dangerous/ hazardous waste on-site. However, BPA Ross uses distillation to recycle small quantities of its on-site generated wastes.

The Ross complex consists of about 250 acres. It has been operated by BPA since 1939 to coordinate the distribution of hydroelectric power generated by the Federal Columbia River Power System to regions throughout the Pacific Northwest. BPA Ross uses only a small portion of the Ross Complex for receipt and storage of dangerous/ hazardous waste. The storage unit is a portion of the HazMat building, shown on Figures D-8 and D-11 of Permit Attachment DD. BPA Ross stores wastes generated both off-site and on-site that require permitted storage. The facility has been operated as a dangerous/ hazardous waste management facility under RCRA since 1982.

The draft permit proposes a maximum capacity of 31,240 gallons for storage of containers of dangerous/ hazardous wastes.

In general, the dangerous/ hazardous wastes managed by BPA Ross are the result of maintenance operations. Wastes stored at the dangerous/ hazardous waste management unit are acid and alkaline wastes, waste oils, solvent and flammable liquids, waste rags containing solvents and/ or mercury, and capacitors with toxic fluids (and no PCBs). No waste is treated or disposed at the facility. BPA Ross does recycle some wastes generated on-site. BPA Ross consolidates some wastes and depressurizes aerosol cans containing wastes; these activities are not considered treatment.

In addition to storing wastes at the dangerous/ hazardous waste storage unit, BPA also can accumulate dangerous/ hazardous waste at other locations throughout the BPA Ross Complex. In general, management of accumulated waste is not subject to this permit. However, BPA is subject to the requirements for large quantity generators in the state's Dangerous Waste Rules. Also, wastes generated on-site that are held in the dangerous/ hazardous waste storage unit will be subject to conditions of the permit.

D. Permit and Permit Conditions

EPA's and Ecology's permits regulate BPA Ross's activities to receive and store dangerous/ hazardous waste at the HazMat building at the Ross Complex. They also regulate certain aspects of the on-site recycling operations.

The dangerous/ hazardous waste management facility permits do not regulate other operations at the Ross Complex; for example, activities at the vehicle maintenance and painting shops. While BPA Ross does accumulate dangerous/ hazardous waste generated on-site, and accumulated waste is regulated under the Dangerous Waste Rules, accumulation areas are not included in the permit.

"Dangerous/hazardous waste management unit," "permitted units", and "facility". Some requirements apply only to the dangerous/ hazardous waste storage unit, others apply to both the dangerous/ hazardous waste storage unit and on-site recycling units, and the remainder apply to the entire facility. For example:

- ✓ The maximum waste storage capacity applies to the dangerous/ hazardous waste storage unit.
- ✓ Records can be stored anywhere at the facility (that is, they do not have to be stored only at the dangerous/ hazardous waste storage unit).
- ✓ The dangerous/ hazardous waste storage unit, but not the entire facility, will be closed under provisions of the Closure Plan that is an attachment to the permit.

General Waste Management Requirements

Notifying Generators of Permit Status

Since BPA Ross receives waste only from other BPA sites, it is not required to notify generators regarding its permit status as required under WAC 173-303-290(3). Therefore, the permit does not contain such a requirement.

Security

BPA Ross controls access to the dangerous/ hazardous waste management unit through the use of locked doors with key card access. Visitors, or other BPA staff who do not have key cards, must request admittance to the building.

Financial assurance

BPA Ross is a federal agency and exempt from the financial assurance and liability requirements specified in Chapter 173-303 WAC. Should BPA transfer the Ross Complex to a private person or corporation, then BPA would be financially responsible for closure and sudden accidents related to storage of dangerous/ hazardous waste at the Ross Complex until the private entity established its own financial assurance and liability instruments.

Coatings on Floors And Sumps

Information BPA provided on the floor coating for the storage area indicated superior chemical resistance to organic solvents "except for methylene chloride". Since used methylene chloride is a F001 waste that could be stored under terms of the draft permit, Ecology checked with the product's manufacturer. The manufacturer reports that the coating maintains its integrity as long as spills of methylene chloride are cleaned up within 72 hours. Since BPA will be checking for spills daily, and cleaning them up immediately, the 72-hour restriction will be met.

Small Quantity Generator Waste

BPA Ross receives waste from off-site small quantity generators (SQG). All these off-site locations are part of the BPA system.

In general, under Ecology's permit, BPA Ross must manage these SQG wastes as fully regulated dangerous waste. For example, BPA must store SQG waste in areas permitted for dangerous waste management and the volume of this waste counts against capacity limits in the

permit for dangerous waste.

However, SQG waste does not have to be manifested from the off-site BPA generator to the storage unit. Currently, as a matter of BPA policy, BPA off-site generators use a manifest when shipping SQG waste to the HazMat building. However, for SQG waste only, the absence of a manifest does not trigger the need for an unmanifested waste report.

BPA Ross does not receive or manage any household hazardous waste.

Recycling Operations

BPA Ross performs some small recycling operations at the Ross Complex. Though federal and state rules regulate recycling activities slightly differently, the EPA and Ecology permits are almost identical.

How do EPA and Ecology regulations on recycling differ?

The EPA has very few requirements for recycling except that equipment and measures to control and reduce air emissions associated with the recycling process are subject to permitting if the facility needs to have a permit for dangerous/ hazardous waste treatment, storage or disposal.

On the other hand, the state regulates many recycling activities under the state Dangerous Waste Rules. For example, solvent recyclers must have a contingency plan and must inspect their operations to prevent problems. Much of the recycling operation itself, however, is exempt from dangerous waste permitting unless Ecology determines, on a case-by-case basis, that it may pose a threat to human health and the environment. Ecology has adopted the requirement that subjects air emissions controls associated with the recycling process to a permit if the facility also needs a permit to treat, store or dispose of dangerous/ hazardous waste.

Since BPA Ross is required to have a dangerous/ hazardous waste permit to store wastes, the air emissions control requirements for the on-site recycling processes are included in the permit. Other parts of these recycling operations, though exempt from a dangerous waste permit, must still comply with certain dangerous waste regulations.

Consistent with federal and state requirements, BPA Ross has included procedures to inspect recycling operations to ensure they meet air emissions standards. Because the distillation units process small quantities of wastes, BPA Ross is able to meet the 40 CFR Subpart AA standards without installing air pollution control devices. Similarly, equipment subject to the 40 CFR Subpart BB standards is operated for fewer than 300 hours a year. Therefore, it meets the exemption requirements in 40 CFR § 264.1050(f), which is incorporated by reference in Chapter 173-303-691.

BPA Ross must monitor and evaluate its recycling operations, which it has committed to do every six months. Also, BPA must keep information on operating and design parameters in the operating record. This information is needed since BPA did not include all the operating information, such as temperature, in the permit application.

Finally, BPA Ross must report to Ecology changes to the recycling operations that may increase emissions. Similarly, for equipment subject to the Subpart BB standards, BPA must report to both EPA and Ecology if it increases operation of any specific equipment subject to the Subpart BB standards to over 300 hours/year.

The reporting requirements allow Ecology and EPA to evaluate whether the changes should result in greater oversight or additional permitting requirements.

Materials to be Reused

BPA Ross holds small containers of paints or other material while exploring options for its re-use. Ecology added a permit condition that requires these containers be identified by labels or other methods. Also, BPA must keep records showing when the containers were received at the storage unit and must manage the materials as dangerous/ hazardous waste within 24 hours of deciding it cannot be reused. Finally, BPA may hold such containers of paints or other material for no longer than a year from the date they were received at the storage unit to avoid meeting the definition of materials that have been accumulated speculatively in WAC 173-303-016(5)(d)(ii).

Waste Analysis Requirements

WAC 173-303-300 requires facilities to have comprehensive and accurate information about the composition of all wastes that the facility will manage. BPA Ross has proposed detailed procedures for waste analysis, both for characterizing wastes and for verifying the identity of wastes actually received from off-site. For example, the permit and its attachments require that reliable information be used to complete a waste profile for every waste stream accepted; BPA Ross calls these profiles *identified waste streams*, or IWS. BPA Ross must also conduct sufficient analyses of wastes they

manage to ensure:

- compliance with land disposal restrictions; and
- safe and effective operation of waste storage processes.

Requirements for waste analysis are complex, and they are critical for the safe operation of the facility.

Waste Characterization

Ecology's permit supports the use of both "acceptable knowledge" and "laboratory analyses" to complete a waste profile. BPA Ross stores wastes generated only at BPA sites. The number and variety of waste streams is very limited. In some cases, BPA must supplement acceptable knowledge with laboratory analyses. When the identity of the waste is unknown, BPA Ross will use the physical description of the waste, and what is known about the source and origin of the waste, to help determine which analyses are necessary. For example, flash point is not performed on solids, unless the waste contains free liquids.

When BPA receives unknown or unidentified wastes, waste characterization, or assigning the waste to an existing profile, must be completed within 30 days.

Ecology prefers that characterization of unknown wastes occur more quickly. However, for the following reasons, the department has determined that BPA's request for 30 days is protective of human health and the environment:

- ✓Unknown or unidentified wastes would be from the BPA Ross Complex only
- ✓BPA generates a limited number of waste streams
- ✓Most of the time, BPA would have some knowledge of the process generating the waste, but would need additional information from laboratory analysis to select the existing profile that matches the waste
- ✓BPA could accumulate these wastes in another part of the Complex. However, keeping the wastes in the dangerous waste management unit, which has been specially designed to safely store wastes, provides the best level of protection to human health and the environment.

When an unidentified waste is received, it is kept in the "pending analysis" bay in a spill pan. While other wastes may be kept in the same bay, no other wastes are put into the same spill pan with the unknown waste. This ensures that no incompatible wastes are inadvertently stored within the same secondary containment. Additionally, some of the wastes kept in the pending analysis bay are not totally unknown, but are awaiting laboratory analysis to discover the presence or absence of specific characteristics (such as toxicity characteristic metals), which will determine whether the waste designates as dangerous/ hazardous waste. An example is sandblasting grit waste. Sometimes this waste designates as a toxicity characteristic waste and sometimes it does not.

BPA Ross must re-characterize wastes periodically; at a minimum wastes must be re-characterized every two years. Re-characterization of waste can include use of both "acceptable knowledge" and "laboratory analyses".

Ecology's permit stresses that BPA Ross is responsible for obtaining accurate and complete information on every waste stream that it manages. Deficient or defective information provided by the BPA site generating the waste is not an acceptable defense for mismanaging the waste at the storage unit.

Verification Analysis

The Ecology permit specifies analyses that BPA must use to verify the identity of each waste stream in each waste shipment that arrives at the facility. There are two major purposes:

- To verify that the waste stream BPA Ross received is the waste stream represented by the shipping manifest and waste profile; and
- To verify critical information (e.g., ignitability, reactivity, compatibility, etc.) about the waste stream that is needed to safely and effectively store the wastes.

BPA Ross has proposed three tiers to their verification analyses. The first tier analysis is to check the physical description of the waste against its identified profile. Many of the waste streams can be verified through their physical description and knowledge of the processes that produce such wastes. For example, BPA Ross workers can readily identify rags with paint-related wastes. In other cases, BPA Ross will use the results of the tier 1 evaluation (the waste's physical description) to determine which additional verification analyses are needed.

The second tier of analyses includes several screening tests. The results of the screening tests will determine whether additional, specific laboratory testing is done. In addition, laboratory testing will be done when results of the routine verification analyses indicate an anomaly or question concerning the identity or composition of the wastes (e.g., the waste does not match the profile or is different from previous waste shipments using the same waste profile.)

Small quantity generator wastes. BPA Ross has proposed to test every tenth container received from off-site small quantity generators. BPA Ross's tracking and numbering system will allow them to determine which container is the tenth received since the last sampled container. Ecology believes that these procedures protect human health and the environment.

Counting SQG Waste

For example, wastes are received as follows for May:

Generator/	# of Drums
A /	2
B /	1
C /	2
D /	1
E /	1
F /	1
A /	1
D /	1 Sample this one
E /	2 Start count again

The off-site wastes come from BPA sites only, and the variety of waste streams is limited. In addition, BPA Ross has internal procedures to educate off-site workers in the event that wastes are incorrectly identified.

Equipment. BPA Ross has specified certain equipment for screening analysis. Should BPA Ross need to replace the equipment in the future, it can purchase and use "equivalent equipment". To be equivalent, the new equipment must have response factors and detection limits that are equivalent to, or better than, those of the equipment listed in the permit attachment.

Inspections and Emergency Planning

Inspections

BPA Ross will conduct periodic inspections at the dangerous/ hazardous waste management unit on an ongoing basis. These inspections are meant to detect and prevent malfunctions, deterioration, operator error, or discharges from the unit that could cause harm to human health or the environment.

Inspections include, but are not limited to, the following:

- Daily inspections of secondary containment areas for leaks and spills;
- Daily inspections of trenches and sumps in load/unload area for precipitation, with removal weekly or when trench or sump is 25% full, whichever occurs sooner (separate requirement for spilled waste)
- Weekly inspection of secondary containment for evidence of cracks or other forms of deterioration;
- Monthly inspection of emergency equipment to, for example, ensure fire extinguishers are fully charged;
- Weekly inspections to ensure a full supply of expendable emergency equipment; and

Inspections listed above are only a few examples of the periodic inspections that will be conducted at the facility under the dangerous/ hazardous waste permit.

If sumps or trenches contain spilled dangerous/ hazardous waste, BPA Ross will remove the waste from the system immediately.

Emergency Planning

The Ecology permit includes a formal Contingency Plan that BPA Ross will follow in the case of an emergency that affects the HazMat building and storage of dangerous/ hazardous waste there. The Plan includes general procedures for responding to emergencies and requirements to notify public officials in the case of an emergency. It also describes the various types of events that will cause BPA to carry out an emergency response under the Plan. If an explosion, fire, or release of hazardous substance occurs elsewhere at the Ross Complex, BPA will respond, but not under this Plan (unless the emergency threatens to affect the dangerous/ hazardous waste management operations at the HazMat building).

Several outside parties have agreements with BPA Ross to assist, if needed, in an emergency. These parties are sent up-to-date copies of the facility Contingency Plan so they are familiar with facility emergency response procedures. The outside parties include:

- Ecology
- Vancouver Fire Department, District 8
- Vancouver Police Department
- Southwest Washington Medical Center
- Clark County Department Of Emergency Services
- Foss Environmental Services
- Spencer Inc.

BPA Ross identifies a trained emergency coordinator whose duty is to direct emergency response procedures. The emergency coordinator is authorized to release BPA funds when responding to emergencies. The person assigned as an emergency coordinator must meet qualifications specified in the permit and dangerous/ hazardous waste regulations.

BPA Ross has proposed an alternate procedure, detailed in permit attachment GG, to change an emergency coordinator or to update phone numbers. In lieu of requesting the permit modification under WAC 173-303-830, BPA Ross can follow the detailed alternative procedures. These alternative procedures ensure that the agencies and organizations that need to be able to contact the emergency coordinator have the information that they need.

In summary, proposed procedures to change an

emergency coordinator or update phone numbers include:

- Specify the name of the new emergency coordinator or the new phone numbers in the Contingency Plan;
- Immediately inform Ecology of the change; and
- Notify all parties who have agreements to assist BPA Ross in the event of an emergency of the change within seven days.

Ecology believes the alternate procedures BPA Ross has proposed protect human health and the environment. They ensure that emergency response agencies receive the updated information they need. No agency approval is needed for a facility to change the name of employees or facility phone numbers. What is important is that emergency response agencies have current information on the identity of emergency coordinators and on the phone numbers to contact them. Ecology is concerned that mailing name changes and phone number changes to the entire dangerous/ hazardous waste management facility mailing list may cause people to overlook more significant changes to permits.

PERSONNEL TRAINING

BPA Ross is required to conduct comprehensive training for employees involved with waste management. Training for all such employees includes the following general topics:

- health and safety
- facility operations
- regulatory requirements
- emergency procedures
- job-specific training.

Two examples of job-specific training are: 1) detailed regulatory training for persons responsible for ensuring facility compliance with the dangerous/ hazardous waste permit and regulations; and 2) training on waste sampling and analysis methods for employees responsible for that function. Comparable job-specific training applies to persons with other duties.

The training program includes initial training for new employees and annual refresher training for all employees. BPA must ensure they supervise new employees at all times until their initial training is complete. Under requirements of the Dangerous Waste Rules, the initial training must be completed within the first six months of a person's employment (or their transfer to new duties). A qualified training director must supervise the training program.

CORRECTIVE ACTION AND CLOSURE

Corrective Action

In 1994, Ecology received authorization from EPA to implement the state corrective action program in lieu of the federal program. As part of the state program, Ecology uses the state cleanup law, the Model Toxics Control Act (MTCA), to conduct corrective actions. Because of the timing for Ecology's authorization, EPA Region 10 conducted corrective action before 1994. Since 1994's authorization, responsibility for corrective action at permitted sites has been moving to Ecology site by site.

BPA Ross has already cleaned up on-site contamination under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly called Superfund. This section of the fact sheet describes the CERCLA study and cleanup and Ecology's evaluation of the cleanup under the state's corrective action program under the Dangerous Waste Rules. It also describes permit conditions related to notification of newly identified contamination or new releases and to Ecology's corrective action authorities.

Activities Conducted Under CERCLA

In November 1989, the EPA listed the BPA Ross site on the federal National Priorities List as a priority for site investigation and cleanup under the federal Superfund program. The listing of the BPA site resulted from the discovery of solvent contamination in shallow groundwater underlying the facility and in proximity to the City of Vancouver's Well Field #3. After investigating the BPA site and evaluating cleanup options, EPA determined that four of the twenty-one identified waste areas required further cleanup. EPA subsequently issued two Records of Decision (commonly called "RODs") in 1993 that detailed a cleanup plan for the four waste areas.

May 1993 ROD. EPA's decision, for "Operable Unit A," detailed cleanups for three areas.

It required ex-situ "enhanced bioremediation" for pentachlorophenol-contaminated soils from creosote-coated poles previously stored at the Wood Pole Storage Area East. About 700 cubic yards of soil failed to meet the targeted cleanup level and were placed in the southwest corner of the pole yard. A gravel cap placed over the storage yard is regularly inspected in this area.

The second area consisted of PCB-contaminated soils at the Ross Substation and Substation Capacitor Yard. Under EPA's direction, BPA Ross excavated these soils and disposed of them offsite. In certain parts of this area,

the presence of obstructions made it impossible to excavate soils to reduce the contamination to below PCB levels of 10 ppm. However, the substation and capacitor yard were already fenced which was sufficient to limit the exposure that BPA workers would experience from the areas with higher levels of contamination. Since industrial cleanup levels were applied, the Substation and Substation Capacitor Yard are subject to "institutional controls." This means that BPA Ross has to ensure the area remains fenced, that access is limited, and that the fence remains in good repair.

In the third area, PCB-contaminated soils at the Capacitor Testing Laboratory were also excavated and disposed of offsite. Because the remedial action goal for PCB contaminated soil at the Capacitor Testing Laboratory was 1 ppm, EPA excluded the area from the need for institutional controls.

September 1993 ROD. EPA's decision for "Operable Unit B," Fog Chamber Dump Trench areas 1 and 2, required both construction and institutional controls.

Under EPA's direction, BPA Ross constructed an impervious cap for the Fog Chamber Dump Trench Area 1, a former open pit dump, to limit surface water from penetrating the ground. This reduced the potential for contaminants to leach from the soils and debris to groundwater. Soil samples collected from former areas of waste debris had contained elevated levels of antimony, arsenic, copper, lead, polyaromatic hydrocarbons, PCBs, dioxin, and furans.

Institutional controls, completed in October 1994, consist of a permanent security fence with a barbed wire top around the perimeter of the area and warning signs stating that digging is prohibited. EPA also required institutional controls for Area 2, adjacent to Trench Area 1, consisting of restrictions on activities that might disturb subsurface contamination.

Cleanup Completed/Site Removed from List. In September 1996, EPA published a notice in the Federal Register stating that the CERCLA cleanup had been completed and the site was being removed from the National Priorities List.

Federal Reviews since 1996. In July 1999, EPA issued a statutorily required Five-Year Review to ensure that the cleanup actions are functioning as designed and remain protective of public health and the environment.

According to the Five-Year Review, onsite groundwater monitoring and groundwater modeling showed that there is no offsite risk of exposure and that groundwater contaminant levels are very nearly at or below the Maximum Contaminant Level (MCL). EPA concluded that cleanup and remediation activities performed at the BPA site complied with state cleanup requirements under the Model Toxics Control Act (MTCA) as well as with the federal requirements under CERCLA.

At EPA's request, BPA Ross submitted a draft "Explanation of Significant Differences" (ESD) to EPA in October 1999 for approval. The ESD is an administrative mechanism under the CERCLA program developed to ensure effective long-term implementation, maintenance and monitoring of institutional control requirements for the individual cleanup sites. This is particularly important for federal sites, like BPA Ross, that do not have a deed. For private properties, institutional controls are formalized as restrictive covenants attached to the deed.

The final ESD, expected in Fall 2000, will include procedures for notification in the event that the portions of the BPA property requiring institutional controls will be transferred or leased to a third party. BPA Ross must provide this notification to both Ecology and EPA in advance of any transfer or lease.

RCRA Corrective Action

EPA Review. In October 1993, the EPA evaluated the need for corrective action under RCRA. This review is required as part of the permit process for hazardous waste management facilities. EPA's review, or RCRA Facility Assessment (RFA), resulted in a report which concluded that "stabilization activities" were not required, since most of the identified solid waste management units (SWMUs) were addressed under CERCLA. The RFA report did identify 7 SWMUs and 7 areas of concern (AOCs) that were not addressed under CERCLA. However, the RFA report recommended "no further action" on all AOCs and all but one SWMU.

The SWMU the RFA identified for further action concerned an alleged leaking drum of waste oil containing PCBs that was referred to in a Toxic Substances Control Act (TSCA) inspection report dated August 1987. During the RFA visual site inspection conducted in 1993, however, the inspectors didn't see any evidence of staining in a gravel-covered lot where the TSCA report indicated that the drum was located.

Ecology Review. As part of the dangerous waste management permit application process, Ecology reviewed the two CERCLA Records of Decision, the Federal Register notice describing the de-listing from the National Priorities List, the Five-Year Review document, information on spills and their cleanup since

EPA de-listed the site, and the draft Explanation of Significant Differences submitted to EPA.

Ecology has also reviewed information on the alleged leaking drum of waste oil. The department has determined that, since there isn't enough information in the TSCA report to determine the area the alleged drum occupied and no evidence of releases from the drum were observed during the RFA, there is insufficient information to do any follow-up soils investigation.

Ecology's review showed that BPA has completed the CERCLA cleanup and has cleaned up the few on-site spills since the site was de-listed from the NPL. In addition, the ESD will include specific procedures to ensure maintenance of the institutional controls implemented under the CERCLA cleanup. Therefore, Part VI, Corrective Action, in the permit includes a condition requiring BPA to submit a class 1 permit modification to incorporate the final Explanation of Significant Difference by reference within 30 days after EPA Region 10 approves it.

Inclusion of the approved ESD by reference will better ensure that all three agencies have a mechanism in place to ensure the institutional controls including the cap and security fence in the Fog Chamber Dump, Trench Area 1 site, are properly maintained.

In addition to incorporating the CERCLA ESD by reference, the permit includes language requiring BPA to notify Ecology if any additional solid waste management units are discovered, or if there are additional releases of dangerous/ hazardous waste or dangerous constituents from the existing areas under "institutional controls".

Ecology notes that EPA has scheduled the next planned 5-year CERCLA program review to occur by September 2004. Therefore, the permit includes a condition that Ecology will review information obtained from the review, then determine if it is appropriate to incorporate revisions into the permit based on the information and conclusions of the 5-year review.

Ecology's permit provides for the use of state authority under the Model Toxics Control Act, Chapter 173-340 WAC, undertaken in whole or in part to fulfill the requirements of WAC 173-303-646, to oversee corrective action at the facility if Ecology determines that this is necessary. If corrective action becomes necessary, the permit modification process will be used to delineate the steps.

Closure

BPA Ross must "close" their dangerous/ hazardous waste storage unit, and associated activities, when they stop storing dangerous/ hazardous waste. Since BPA Ross's primary purpose is to serve as a control center for the generation and transmission of electricity throughout the Pacific Northwest, the dangerous/ hazardous waste management activities are only a small part of the site's operations. Therefore, BPA Ross does not have to "close" the entire Ross Complex when the dangerous/ hazardous waste management unit is closed.

To "close," BPA Ross must remove all of the dangerous/ hazardous waste from the storage unit and decontaminate or remove any equipment, structures and contaminated environmental media (for example, soil) associated with the unit. If this cannot be accomplished, then BPA Ross must conduct corrective action to clean up any contamination on-site or develop and carry out engineering or procedural solutions to ensure any contamination remaining on site will not cause additional contamination to the environment.

The Ecology permit includes detailed step-by-step procedures that BPA Ross must follow. BPA has estimated the cost of conducting each of these steps at a time when the storage unit is operating at its maximum capacity. Because BPA is a federal agency, however, it does not need to provide assurance that it has the finances available to conduct a complete closure of the facility. Therefore, the permit application – and the permit itself – does not contain financial assurance mechanisms for closure. Though financial assurance is not necessary, the permit includes a condition for BPA Ross to update the cost estimate five years after the permit goes into effect and to keep this updated estimate in the operating record. This will help ensure that the cost estimate, needed for any budget request to carry out closure, is periodically updated.

Under the required closure performance standard, which is removal of the top 0.6 centimeter of concrete, BPA Ross would not need to perform analytical testing on concrete. However, BPA Ross is proposing to decontaminate concrete structures by power washing, rather than by using the land disposal treatment standards in 40 CFR 268.45 Table 1[1].

Therefore, as part of "closure," BPA Ross is required to sample and analyze concrete and soil at the storage unit to demonstrate that it has met closure standards. General sampling and analytical procedures, minimum number of samples, criteria for selecting additional sampling locations**,** and minimum laboratory analyses of chemical

[1] Which requires removing the top 0.6 centimeters of concrete, then looking for areas of staining.

constituents that will be performed, are included in the permit.

BPA Ross is required to submit an updated Sampling and Analysis Plan at least 60 days before closure is to begin. Certain information needed to develop the final detailed sampling and analysis plan, including current analytical procedures and up-to-date facility operating history, will not be available until that time.

The Sampling and Analysis Plan will also include the results of BPA Ross's inspection of the floors and walls of the storage area to identify cracks, stained areas, and areas where spills have occurred.

Ecology has also added a condition that requires BPA Ross to include a list of the "listed wastes" received and stored at the dangerous/ hazardous waste management unit. This information is needed because BPA will have to request a "contained out" determination for any dangerous/ hazardous waste or dangerous constituents associated with "listed wastes" found in chip samples or soils. This is important because the current Part A form may not include all the various types of listed wastes the facility may have managed over the years. In the future, BPA Ross may request a permit change to remove certain "listed wastes" from the list of those wastes the facility is allowed to manage.

At Ecology's request, BPA has included procedures to invite Ecology to attend the inspection, to identify cracks and stained areas, that will occur before the Sampling and Analysis Plan is revised. The procedures include the invitation. They do not require that Ecology attend. Thus, Ecology's inability to attend, for whatever reason, will not be a cause for BPA Ross to delay the inspection.

BPA Ross will sample the concrete floor and the soil beneath the building at locations in the storage area where facility records show that past spills or cracks occurred, whether or not the spills were cleaned up immediately or the cracks repaired. (These requirements are in addition to the random sampling to be performed on all the storage, load/unload, bulking, and shipping and receiving area.)

Since BPA Ross proposes to fully close the dangerous/ hazardous waste storage unit, they have not proposed post-closure care.

RECORDKEEPING AND REPORTING

Recordkeeping

BPA Ross must maintain detailed operating records at the facility. These records document compliance with conditions of the permit and the Dangerous Waste Rules. The facility must also make records of spills, releases, incidents of noncompliance, and emergency situations. Depending on the type, BPA must keep records at the facility for time periods ranging from 3 years to the time closure is completed. Both EPA's and Ecology's permits contain recordkeeping requirements.

Reporting

BPA Ross must report certain information to Ecology and to EPA. For example, reports to Ecology are required for the following:

- waste shipments received that do not agree with the accompanying manifest or shipping paper if the discrepancy can not be resolved within 15 days;
- incidents that caused BPA Ross to implement their Contingency Plan;
- annual reports on the facility's operation; and
- every 5 years, cost estimates for closure that are adjusted for inflation.

In addition, under EPA's permit, BPA Ross must include information on waste minimization efforts in the annual report submitted in every even numbered year.

This list does not include all reports BPA Ross must submit to Ecology or to EPA

E. CHANGES TO RCRA/RCRA RULES UNDER THE HAZARDOUS AND SOLID WASTE AMENDMENTS

In general, new or amended requirements in the Hazardous and Solid Waste Amendments of 1984 and related regulations will automatically apply to BPA Ross's dangerous/ hazardous waste management activities. The exception is for new requirements that are less stringent than those in effect when the agencies issue the permit decisions.

F. CONCLUSION

In its permit application, BPA Ross has demonstrated that it is capable of safely operating its dangerous/ hazardous waste storage facility under the conditions required for a final permit. Therefore, Ecology and EPA have each made tentative decisions to issue a final status permit to the facility. The Ecology permit includes the majority of BPA Ross's permit application, with some additional requirements Ecology has specified as conditions. EPA's permit includes more limited portions of the application and the requirements that agency is specifying as conditions.